GOVERNMENT OF THE DISTRICT OF COLUMBIA BOARD OF ZONING ADJUSTMENT



Application No. 13894, of Georgetown University, pursuant to Sub-section 8207.2 of the Zoning Regulations, for a special exception under Paragraph 3101.46 for further processing under the approved Georgetown University Campus Plan to permit the construction of an addition to the heating and cooling plant in an R-3 District at the premises 3800 Reservoir Road, N. W.

HEARING DATE: January 19, 1983

DECISION DATE: January 19, 1983 (Bench Decision)

FINDINGS OF FACT:

- 1. Upon motion of the applicant, the Board granted the applicant's request to file revised floor area ratio and gross floor area computations at the hearing. These revised figures correspond to the figures submitted with the plans for the addition designated as Exhibit No. 10 of the record.
- 2. The applicant's request is for a special exception for further processing of the approved Georgetown University Campus Plan to permit construction of an addition to the heating and cooling plant covering 4,031.25 square foot of land area and containing 8,063.5 square feet of gross floor area. The dimensions of the addition will be 62.5 feet by 64.5 feet. The premises affected are located at 3800 Reservoir Road, N. W., and are in the R-3 District.
- 3. Georgetown University, the applicant, was established in 1789 under a charter granted to it by the Congress of the United States. It is an accredited university under the Zoning Regulations.
- 4. This application is submitted pursuant to the Georgetown University Campus Development Plan that was reviewed and approved by the Board in 1977 in BZA Application No. 10814. The Board has found on prior occasions that a university's master plan serves as a guide to planning for the university and indicates the general locations of the various land uses. The Board finds that the addition proposed by the applicant follows the generalized location set forth in the Campus Plan and is in accord with the spirit of the approved Plan.
- 5. The heating and cooling plant is located in the western part of the campus. The plant consists of steam

generating boilers and chillers to supply steam and chilled water to most of the other campus buildings through underground distribution systems.

- 6. To the west of the plant is McDonough Gymnasium. To the south and east are parking areas, volleyball, basketball and tennis courts, and soccer and baseball fields. To the north is a recreation complex. It is an underground recreational facility with Kehoe Field for spectator sports reconstructed on the roof.
- 7. In BZA Application No. 12316, by order dated July 21, 1977, the Board granted a special exception to the applicant to construct a 11,998 square foot addition to the University's heating and cooling plant. The addition was constructed as a demonstration project under a grant from the Energy Research and Development Administration (now the U.S. Department of Energy) and has been operated under the supervision of DOE and the Environmental Protection Agency. The purpose of the project was to demonstrate the feasibility of the use of high sulphur content coal by institutions such as Georgetown University in furtherance of the national policy of the promotion of energy conservation through the use of coal, including the development of new technological advances such as cogeneration.
- 8. The first objective of the project was achieved with the construction of the original addition. A fluidized coal system was developed to allow the increased use of coal without the adverse environmental impacts usually associated with coal combustion. This is accomplished by burning the coal with limestone which absorbs the pollutants.
- This addition will allow the applicant to achieve the second objective of the demonstration project. When the first addition was approved by the Board, it was contemplated that new technology would be developed to increase the existing efficient use of the boiler plant and that new and additional equipment could be housed for this phase of the Thus, the demonstration project offered the opportunity to develop new design and technology for more efficient use of energy. As the operation and technology advanced, the facility underwent further design refinement to permit an increase in steam pressure used in the cogeneration of electricity. Due to the development of necessary support facilities during the progress of the project and the configuration of the necessary equipment under current design standards, the existing plant does not provide sufficient space to house the cogeneration equipment. In order to accommodate this phase of the demonstration project and other technological advancements in the future production of energy, the applicant requires an addition to the existing building.

- 10. This project is designed to harness the additional pressure generated by the plant and convert it to electricity to offset the electricity consumed by the plant motors. This alternative form of energy production conforms to the national energy policy for reducing energy consumption and increasing reliance on domestic coal without serious long-term effects. The boilers will operate at higher load factors, improve efficiency and maintain the reduced emissions level.
- 11. The addition to the power plant will not be objectionable due to noise because it is well within the campus boundaries and is not adjacent to any residential buildings or classrooms. The addition will be constructed of materials that provide a maximum amount of sound insulation. All noise-emitting equipment will be located inside the addition, which limits the transmission of noise to the outside. Equipment installation, vibration isolation and sound-absorbent enclosures will ensure that interior noise levels conform to OSHA standards. Outside noise levels will not be noticeably increased.
- 12. Traffic due to coal, limestone and solid waste hauling by trucks without cogeneration of electricity presently averages ten vehicle operations per day at maximum capacity. With the addition, annual traffic volume will increase by only four percent or approximately 10.4 vehicle operations per day. Peak daily traffic will not change. The Board finds that this increase in traffic volume will not have a measureable impact upon the access roads and therefore will not be objectionable to neighboring owners.
- 13. There will be no increase in the enrollment of students at the University as a result of the proposed addition.
- 14. The gross floor area of existing buildings and buildings under construction on the campus is 3,272,849 square feet, or a floor area ratio of .749. The gross floor area of the proposed addition is 8,062.5 square feet. The total gross floor area of the University with this building would be 3,280,911.5 square feet, or .750 FAR. The maximum permitted FAR is 1.8.
- 15. The University has at present 3,482 parking spaces. The University is required to provide 1,919 parking spaces. The proposed project will eliminate twelve parking spaces, but will not affect the number of spaces required.
- 16. The applicant testified that the existing facility utilizes twenty-five employees. With the proposed addition, initially one and ultimately three additional employees may be necessary.

- 17. The Board finds that the plant will be operated in such a manner that the air quality standards of the District of Columbia and the United States will be met.
- 18. The applicant does not seek relief in this application for the interim use of land.
- 19. The Office of Planning, by report dated January 11, 1983, recommended approval of the application. A representative of the Office of Planning testified at the public hearing that the location and scale of the proposed addition conforms with the provisions of the approved campus plan and that the development will not have an adverse impact on the surrounding neighborhood due to traffic, noise or other objectionable conditions. The Board so finds.
- 20. The District of Columbia Department of Transportation, by memoranda dated November 17, 1982 and January 8, 1983, stated that the power plant is well within the boundary of the campus, is away from all existing public streets, and is in keeping with the Georgetown University Campus Plan. Therefore, the Department had no objections to the proposed addition. The Board so finds.
- 21. Advisory Neighborhood Commission 3A, by letter dated January 7, 1983, reported that, at its regular monthly meeting on January 5, 1983, the ANC determined not to object to the completion of the heating and cooling plant, approved in Case No. 12316, as described in BZA Application No. 13894. The ANC concurred with the University that the proposed power plant addition is so located that it is unlikely to become objectionable to neighboring property owners and it will not constitute unreasonable development of the campus area. The Board concurs with the findings and recommendation of ANC 3A.
- 22. The United States Environmental Protection Agency, by letter dated December 16, 1982, noted that the applicant's power plant during the testing period operated so as to remove 99.9% of the particulate matter from the flue gas. The EPA further noted that the applicant's facility has played a highly significant role in the program to develop emission information for the fluidized bed combustion technology.
- 23. The United States Department of Energy, by letter dated January 6, 1983, concluded that the applicant's fluidized bed boiler project has successfully demonstrated the feasibility of burning high sulphur coal in an environmentally acceptable manner. The Department stated that it viewed the cogeneration project at the University to be a highly significant step in its ongoing program to promote energy efficient systems and processes which conserve scarce energy resources.

There was no opposition to the application at the public hearing or in the record.

CONCLUSIONS OF LAW AND OPINION:

Based on the record, the Board concludes that the applicant is seeking a special exception, the granting of which requires that the applicant, through substantial evidence, prove compliance with the requirements of Paragraph 3101.46 of the Zoning Regulations. The Board concludes that the applicant has met its burden of proof. The Board concludes that Georgetown University is a university within the meaning of the Zoning Regulations. The Board concludes that the proposed power plant addition is so located that it is not likely to become objectionable to neighboring property owners because of noise, traffic, number of students or other objectionable conditions and that the proposed addition, when added to all existing buildings and structures on the Campus, does not exceed the gross floor area prescribed for the R-5-B District. Board further concludes that the relief will be in harmony with th general purpose and intent of the Zoning Regulations and will not tend to affect adversely the use of neighboring property.

The Board further concludes that it has accorded to the ANC the "great weight" to which it is entitled. Accordingly, it is ORDERED that the application is GRANTED.

VOTE: 4-0 (John G. Parsons, William F. McIntosh, Carrie L. Thornhill and Douglas J. Patton to grant, Charles R. Norris not present, not voting).

BY ORDER OF THE D.C. BOARD OF ZONING ADJUSTMENT

ATTESTED BY:

STEVEN E. SHER Executive Director

FINAL DATE OF ORDER:

APR 11 1983

UNDER SUB-SECTION 8204.3 OF THE ZONING REGULATIONS, "NO DECISION OR ORDER OF THE BOARD SHALL TAKE EFFECT UNTIL TEN DAYS AFTER HAVING BECOME FINAL PURSUANT TO THE SUPPLEMENTAL RULES OF PRACTICE AND PROCEDURE BEFORE THE BOARD OF ZONING ADJUSTMENT."

THIS ORDER OF THE BOARD IS VALID FOR A PERIOD OF SIX MONTHS AFTER THE EFFECTIVE DATE OF THIS ORDER, UNLESS WITHIN SUCH PERIOD AN APPLICATION FOR A BUILDING PERMIT OR CERTIFICATE

BZA Application No. 13894 Page 6

OF OCCUPANCY IS FILED WITH THE DEPARTMENT OF LICENSES, INVESTIGATIONS AND INSPECTIONS.

13894order/BETTY5